that of John Lewis Bicardo, nephew of the great political economist, who established the first Electric Telegraph for national purposes. Later on, the copper alloys which made possible long-distance telephoning were first used in Europe by Lazare Jean Weiller. And it was Robert von Lieben who invented the radio amplifier which made possible the development of modern radio, as well as of the sound film — an achievement which earned for him (until they discovered his Jewish origin) the enthusiastic plaudits of the anti-Semitic Press in Germany.

Minor mechanical devices and processes of Jewish origin which are in daily use are numerous. The sewing-machine, which made possible the immense reduction in the price of clothing, was developed to a high pitch of efficiency by Isaac Singer. Nahum Salamon, a London Jew, established the first bicycle factory in Coventry: and it was his invention of the spider -wheel which made the modern safety -bicycle possible. The Luxemburger, Gabriel Lippmann, was discoverer of the capillary electrometer and of colour photography (gaining the Nobel Prize for the latter) : the Italian, Samson Valobra, invented the safety-match: Abraham Stern made the first calculating machine: L. B. Phillips (an able etcher of the last generation) invented the keyless watch, which is now almost universally used: Aaron Hirsch introduced various improved metallurgical pro-

cesses: Moritz Hermann Jacobi, a prominent German
architect of his day, was the inventor of galvanoplasty,
with all its manifold subsidiaries (including electrotyp-
ing): Joseph d'Aguilar Samuda, the most eminent
nautical engineer of early Victorian times, was the pioneer
in the use of iron for the construction of steamships,